Creating an Integrated Regional Model

Data to Policy

DRCOG
Denver Regional Council Of Governments
Metro Vision Resource Center

Two Discussion Periods

- Morning: the "big picture"
  - Touch on existing model shortcomings
  - Experiences, thoughts, hopes.
  - What is an integrated model, and how can we build one?
  - Some foundational issues.
  - Some goals.
- Afternoon: detailed discussion of key elements.

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The Four-step model

- We're all familiar with it
- Accuracy: moderate
- Ok on the big picture, sometimes poor on the small picture.
- Demographic sensitivity: limited
- Policy sensitivity: limited

Some relevant DRCOG experience

- The TIP projects database
- The Linear Reference System
- The Land Use Allocation Model
- Air Quality Modeling (Mobile5 and Dispersion)
- The Policy Options Model

What is an "integrated" model?

- Fundamentally different, or just a lot of little things?
- More than just the land use and transportation (and maybe air quality) models?
- Other possibilities:
  - The transportation planning/projects system
  - The land use planning/policy system
  - The geographic data warehouse
  - Policy support tools
  - What else?

Some Foundational Issues

- Level of resolution of various variables.
- Model turn-around time.
- Scenario management and development.
- Resource requirements (staff, software, hardware, etc.)

Some Foundational Issues II

- Data: define overall requirements
  - Data integration, including integration of network-based data, etc.
  - Improved input/output
  - Better management through the model process
  - Enhanced spatial-enablement of data
  - What else?

Some Goals

- Timely (goal: full run in one month)
- Some questions must be answered immediately (POM)
- Better accuracy (where are the holes today?)
- Better sensitivity (think about policy questions that require it).
- Easier to operate (data integration, etc.)